

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method for manufacturing a circuit board comprising:

attaching a mask film, where a squeegee cleaning part has been formed at a predetermined position, to a substrate; then

forming a through-hole; and

filling conductive paste into the through-hole by using a squeezing method.

2. (Original) A method for manufacturing a circuit board comprising:

attaching a mask film to both sides of a substrate; then

forming a through-hole; and

filling conductive paste into the through-hole by using a squeezing method,

wherein a squeegee cleaning part is formed at a predetermined position of the mask film before the filling of the conductive paste.

3. (Currently Amended) The method for manufacturing a circuit board of claim 1-~~or~~
~~claim 2~~,

wherein the predetermined position is a position of an unnecessary part of a product area or an outside of the product area of a paste-filling area of the mask film and within a printing range.

4. (Original) The method for manufacturing a circuit board of claim 1,

wherein the squeegee cleaning part is hound's-tooth through-holes formed at the mask film.

5. (Currently Amended) The method for manufacturing a circuit board of claim 1-~~or claim 2~~,

wherein the squeegee cleaning part is a no-penetrated linear groove formed at a paste-filling area of the mask film.

6. (Original) The method for manufacturing a circuit board of claim 5,

wherein the squeegee cleaning part is a plurality of the no-penetrated linear groove.

7. (Currently Amended) The method for manufacturing a circuit board of claim 1-~~or claim 2~~,

wherein the squeegee cleaning part of the mask film has a swollen portion.

8. (Original) The method for manufacturing a circuit board of claim 5,

wherein the no-penetrated groove of the mask film is processed by using a cutting edge.

9. (Original) The method for manufacturing a circuit board of claim 8,

wherein the cutting edge is a round blade.

10. (Original) The method for manufacturing a circuit board of claim 9,

wherein the round blade is fixed to a blade-fixing section having vertically sliding function with a certain load so as not to rotate.

11. (Original) The method for manufacturing a circuit board of claim 10,

wherein a depth of the groove and a height of a swollen portion of the squeegee cleaning part are set by adjusting an edge angle of the round blade and the load.

12. (Original) The method for manufacturing a circuit board of claim 7,

wherein the swollen portion is not lower than 3 μ m.

13. (Currently Amended) The method for manufacturing a circuit board of claim 1-~~or claim 2~~,

wherein the substrate is a prepreg where resin material, whose main body is thermosetting resin, is impregnated into a fabric or a nonwoven fabric, thereby forming B-stage.

14. (Original) The method for manufacturing a circuit board of claim 13,
wherein aramid fabric is a main body of the fabric or the nonwoven fabric.

15. (Original) The method for manufacturing a circuit board of claim 13,
wherein glass fiber is a main body of the fabric or the nonwoven fabric.

16. (Currently Amended) The method for manufacturing a circuit board of claim 1-~~or claim 2~~,

wherein the filling of the conductive paste into the through-hole by using the squeezing method comprises:

filling the conductive paste into the through-hole by reciprocating a squeegee on the circuit board; and

cleaning an edge of the squeegee by using the squeegee cleaning part.

17. (Original) An apparatus for manufacturing a circuit board comprising:

a transporting means for transporting a substrate;

supplying means, which are placed above and below the transporting means, for supplying mask films;

a laminate roll; and

a groove processing section, which is placed behind the laminate roll and above the transporting means, for processing a groove at the mask film.

18. (Original) The apparatus for manufacturing a circuit board of claim 17,

wherein the groove processing section is formed of a blade-fixing section including a blade with a certain range of an edge angle and a blade-fixing-section-installing unit having a sliding section,

wherein the blade-fixing section is capable of sliding up and down at the sliding section of the blade-fixing-section-installing unit.

19. (Original) The apparatus for manufacturing a circuit board of claim 18,

wherein the blade is a round blade, and fixed to the blade-fixing section so as not to rotate.

20. (Original) The apparatus for manufacturing a circuit board of claim 17,

wherein the groove processing section placed above the transporting means is capable of being positioned and fixed.

21. (Original) The apparatus for manufacturing a circuit board of claim 17, further comprising:

a backing roll directly under the groove processing section and under the transporting means.

22. (Original) The apparatus for manufacturing a circuit board of claim 18,

wherein the edge angle of the blade ranges 30-90°.

23. (New) The method for manufacturing a circuit board of claim 2,

wherein the predetermined position is a position of an unnecessary part of a product area or an outside of the product area of a paste-filling area of the mask film and within a printing range.

24. (New) The method for manufacturing a circuit board of claim 2,

wherein the squeegee cleaning part is a no-penetrated linear groove formed at a paste-filling area of the mask film.

25. (New) The method for manufacturing a circuit board of claim 24,

wherein the squeegee cleaning part is a plurality of the no-penetrated linear groove.

26. (New) The method for manufacturing a circuit board of claim 2,

wherein the squeegee cleaning part of the mask film has a swollen portion.

27. (New) The method for manufacturing a circuit board of claim 24,

wherein the no-penetrated groove of the mask film is processed by using a cutting edge.

28. (New) The method for manufacturing a circuit board of claim 27,

wherein the cutting edge is a round blade.

29. (New) The method for manufacturing a circuit board of claim 28,

wherein the round blade is fixed to a blade-fixing section having vertically sliding function with a certain load so as not to rotate.

30. (New) The method for manufacturing a circuit board of claim 29,

wherein a depth of the groove and a height of a swollen portion of the squeegee cleaning part are set by adjusting an edge angle of the round blade and the load.

31. (New) The method for manufacturing a circuit board of claim 26,

wherein the swollen portion is not lower than 3 μ m.

32. (New) The method for manufacturing a circuit board of claim 2,

wherein the substrate is a prepreg where resin material, whose main body is thermosetting resin, is impregnated into a fabric or a nonwoven fabric, thereby forming B-stage.

33. (New) The method for manufacturing a circuit board of claim 32,

wherein aramid fabric is a main body of the fabric or the nonwoven fabric.

34. (New) The method for manufacturing a circuit board of claim 32,

wherein glass fiber is a main body of the fabric or the nonwoven fabric.

35. (New) The method for manufacturing a circuit board of claim 2,

wherein the filling of the conductive paste into the through-hole by using the squeezing method comprises:

filling the conductive paste into the through-hole by reciprocating a squeegee on the circuit board; and

cleaning an edge of the squeegee by using the squeegee cleaning part.